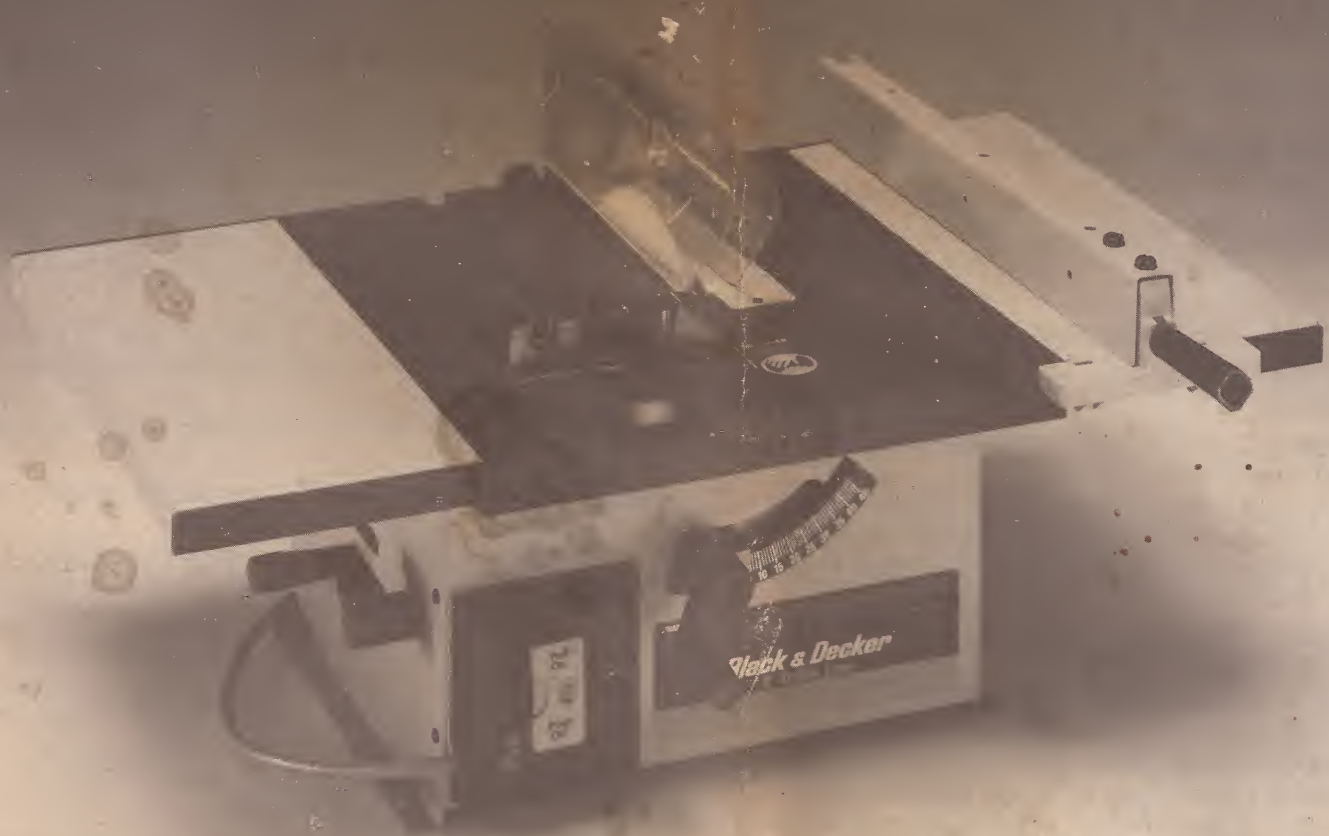




Black & Decker®

OWNER'S MANUAL



8" TABLE SAW

9419

9419

8" TABLE SAW

INTRODUCTION

Your 9419 8" Table Saw has been carefully engineered for versatility, dependability and long life. Its design reflects the quality that has made Black & Decker the most respected name in Power Tools for over half a century.

Please take the time to carefully read this owner's manual and follow the step by step assembly instructions. Only then can you realize the full potential of your table saw.

Don't forget to send in your registration card.

Thanks for buying Black & Decker.

SAFETY RULES FOR TABLE SAWS

WARNING: When using electric tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock and personal injury, including the following:

READ ALL INSTRUCTIONS

1. When servicing use only identical replacement parts.
2. **KEEP GUARDS IN PLACE** as required and in working order.
3. **REMOVE ADJUSTING KEYS AND WRENCHES.** Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
4. **KEEP WORK AREA CLEAN.** Cluttered areas and benches invite accidents.
5. **KEEP CHILDREN AWAY.** All visitors should be kept a safe distance from work area.
6. **MAKE WORKSHOP KID PROOF** with padlocks, master switches, or by removing start keys.
7. **DON'T FORCE TOOL.** It will do the job better and safer at the rate for which it was designed.
8. **USE RIGHT TOOL.** Don't force tool or attachment to do a job for which it was not designed.
9. **WEAR PROPER APPAREL.** Don't wear loose clothing, gloves, neckties, rings, bracelets, or other jewelry that could get caught in moving parts. Nonslip footwear is recommended. Wear protective hair covering to contain long hair.
10. **ALWAYS WEAR SAFETY GLASSES.** Also use face or dust mask if cutting operation is dusty. Everyday eyeglasses have only impact resistance lenses, they are **not** safety glasses.
11. **KNOW YOUR POWER TOOL.** Read owner's manual carefully. Learn its applications and limitations as well as the specific potential hazards peculiar to this tool.
12. **AVOID DANGEROUS ENVIRONMENT.** Don't use power tools in damp or wet locations or expose them to rain. Keep work area well lighted.
13. **DISCONNECT TOOLS** before servicing; when changing accessories such as blades, bits, cutters, or when clearing away sawdust.
14. **AVOID UNINTENTIONAL STARTING.** Make sure switch is in the off position before plugging in.
15. **USE RECOMMENDED ACCESSORIES.** Consult the owner's manual for recommended accessories. The use of improper accessories may cause risk of injury.
16. **CHECK DAMAGED PARTS.** Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function — check for alignment of moving parts, binding of moving parts, breakage of parts, mounting and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced.
17. **NEVER LEAVE TOOL RUNNING UNATTENDED. TURN IT OFF.** Don't leave tool until it comes to a complete stop.
18. **SECURE SAW.** Be sure Table Saw is firmly mounted before using.
19. **DON'T OVERREACH.** Keep proper footing and balance at all times.
20. **MAINTAIN TOOLS WITH CARE.** Keep tools sharp and clean for best and safest performance. Follow instructions for lubricating and changing accessories.
21. **DON'T ABUSE CORD.** Never carry tool by cord or yank it to disconnect from receptacle. Keep cord away from heat, oil and sharp edges.
22. **DO NOT OPERATE TOOL IN GASEOUS OR EXPLOSIVE ATMOSPHERES.**
23. Always wait for blade to stop rotating before removing cut off pieces.
24. **NEVER STAND ON TOOL.** Serious injury could occur if the tool is tipped or if the cutting tool is unintentionally contacted.
25. **DIRECTION OF FEED.** Feed work into a blade or cutter against the direction of rotation of the blade or cutter only.
26. **DO NOT USE ABRASIVE OR FRICTION CUTTING BLADES.**
27. This saw is recommended for cutting wood and plastic materials only.

SAVE THESE INSTRUCTIONS FOR FUTURE USE

REFER TO PAGE 13 FOR ADDITIONAL SAFETY NOTES.

GROUNDING INSTRUCTIONS

1. **All grounded, cord-connected tools** — In the event of a malfunction or breakdown, grounding provides a path of least resistance for electric current to reduce the risk of electric shock. This tool is equipped with an electric cord having an equipment-grounding conductor and a grounding plug. The plug must be plugged into a matching outlet that is properly installed and grounded in accordance with all local codes and ordinances.

Do not modify the plug provided — if it will not fit the outlet, have the proper outlet installed by a qualified electrician.

Improper connection of the equipment-grounding conductor can result in a risk of electric shock. The conductor with insulation having an outer surface that is green (with or without yellow stripes) is the equipment-grounding conductor. If repair or replacement of the electric cord or plug is necessary, do not connect the equipment-grounding conductor to a live terminal.

Check with a qualified electrician or serviceman if the grounding instructions are not completely understood, or if in doubt as to whether the tool is properly grounded.

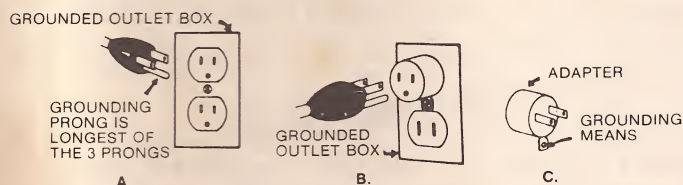
Use only 3-wire extension cords that have 3-prong grounding plugs and 3-pole receptacles that accept the tool's plug.

Repair or replace damaged or worn cords immediately.

Grounded, cord-connected tools intended for use on a supply circuit having a nominal rating less than 150 volts: This tool is intended for use on a circuit that has an

outlet that looks like the one illustrated in Sketch A. The tool has a grounding plug that looks like the plug illustrated in Sketch A. A temporary adapter, which looks like the adapter illustrated in Sketches B and C, may be used to connect this plug to a 2-pole receptacle as shown in Sketch B if a properly grounded outlet (Sketch A) is not available. The green-colored rigid ear, lug, etc. extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box. The temporary adapter should be used only until a properly grounded outlet (Sketch A) can be installed by a qualified electrician.

GROUNDING METHODS



EXTENSION CORDS

Tools that have 3 wire cords requiring grounding must only be used with extension cords that have 3-prong grounding type plugs and 3-pole receptacles. Only round jacketed extension cords should be used, and we recommend that they be listed by Underwriters Laboratories (U.L.). If the extension will be used outside, the cord must be suitable for outdoor use. Any cord marked as outdoor can also be used for indoor work. The letters "WA" on the cord jacket designate outdoor use.

(Continued on Page 4)

GLOSSARY OF TERMS

- | | |
|-------------------------|--|
| 1. Bevel: | An angled rip or crosscut made with the saw blade at some angle other than 90°. |
| 2. Combination Square: | A tool used to measure 90° and 45° angles having a steel base and a sliding steel ruler that can be locked to the base. (see figures 18, 20) |
| 3. Compound Mitre: | A cut combining mitre adjustment and bevel adjustment. |
| 4. Crosscut: | A cut made 90° to the grain of a piece of wood. |
| 5. Gib: | A metal bar used to secure the saw to the workbench. |
| 6. Gullet: | The part of a saw blade between the teeth. |
| 7. Kerf: | The width of the cut made by a saw blade. |
| 8. Kickback: | Small pieces of wood picked up by the blade and thrown toward the operator. The entire workpiece can also be kicked back. |
| 9. Machine Screw: | A screw that fastens to a nut or other threaded object. |
| 10. Mitre Gauge: | An adjustable device used to cut angles. |
| 11. Mitre: | An angled crosscut or rip. (some angle other than 90°) |
| 12. Pawls: | Toothed pieces on either side of the spreader used to control kickback. (see figure 27). |
| 13. Push Stick: | A piece of wood fashioned so that it can be used to push wood into the saw blade and keep your hands away. |
| 14. Rip: | A cut made in the direction of the grain of a piece of wood. |
| 15. Rip Fence: | A device that is clamped to the table top used to guide rip cuts. |
| 16. Self-Tapping Screw: | A screw which forms its own threads in a smooth bored hole. |
| 17. Spreader: | The steel support that holds the plastic blade guard. (see figures 27, 28, 30 & 31). |

(Continued from Page 3)

An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety, and to prevent loss of power and overheating. The smaller the gauge number of the wire, the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. When using more than one extension cord to make up the total length, be sure each individual extension cord contains at least the minimum wire size.

To determine the minimum wire size required, refer to the chart below:

CHART FOR MINIMUM WIRE SIZE (AWG) OF EXTENSION CORDS

NAMEPLATE RATING — AMPS	TOTAL EXTENSION CORD LENGTH — FEET							
	25	50	75	100	125	150	175	200
0 - 10.0	18	18	16	16	14	14	12	12
10.0 - 13.0	16	16	14	14	12	12	12	12
13.1 - 15.0	14	14	12	12	12	12	12	—

Before using an extension cord, inspect it for loose or exposed wires, damaged insulation, and defective fittings. Make any needed repairs or replace the cord if necessary. Black & Decker has extension cords available that are U.L. listed for outdoor use.

MOTOR

Your Black & Decker tool is powered by a B&D-BUILT MOTOR. Be sure your power supply agrees with the nameplate marking. 120 volts 50/50 Hz means alternating current (normal 120 volt, 60 Hz house current). A voltage decrease of more than 10% will cause loss of power and overheating. All B&D tools are factory tested; if this tool does not operate, check the power supply.

LUBRICATION

This saw motor is equipped with sealed ball bearings. Periodic lubrication is not necessary.

Packed inside the table saw is a 2 piece cardboard filler. Remove this filler from the bottom of the saw before beginning assembly. **DO NOT REMOVE SUPPORT BAR FROM BOTTOM OF SAW.**

ASSEMBLY — (tools required) one #2 medium Phillips screwdriver; one medium blade standard screwdriver; one adjustable wrench; one combination square.

I. **INSTALLATION OF TABLE EXTENSIONS (Figure 2)** shows the operations you will be performing in this section. (Familiarize yourself with figure 2 before you begin.)

Parts needed (See figure 1):

two Table Extensions
two Front Support Bars
two Rear Support Bars

twelve self-tapping screws
eight 8-32 machine
screws and hex nuts

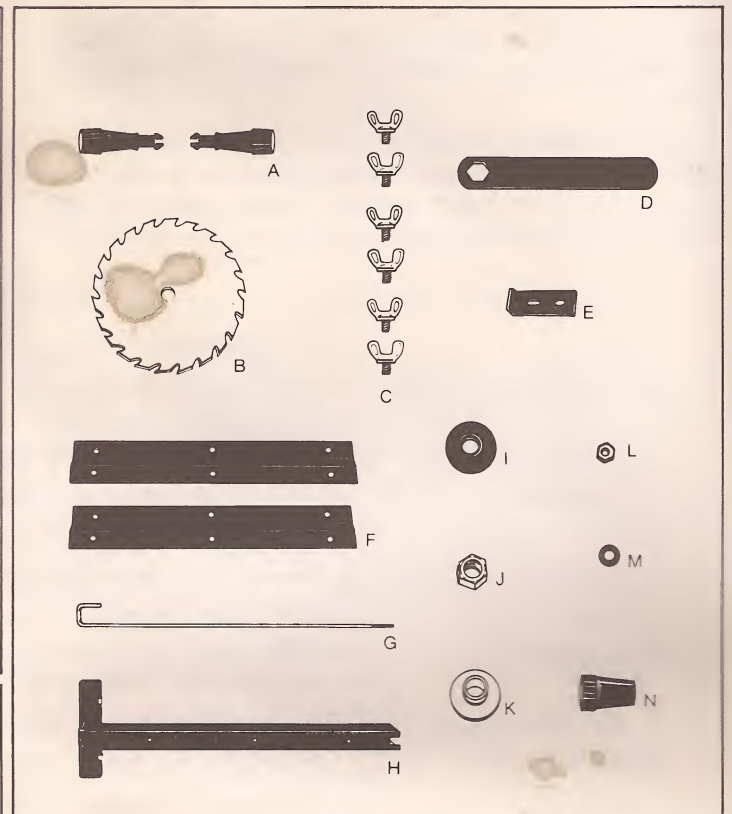
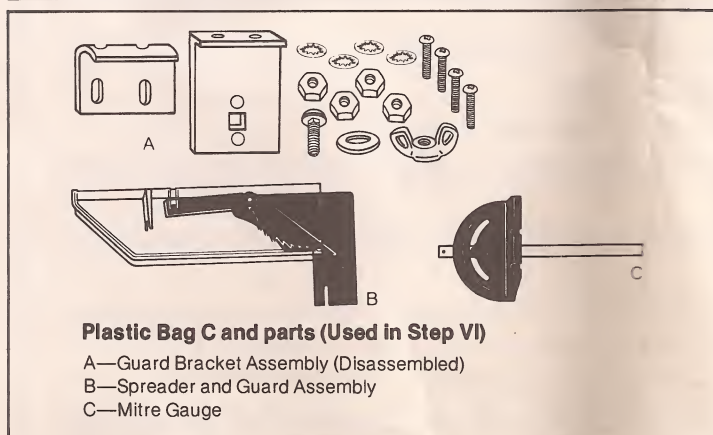
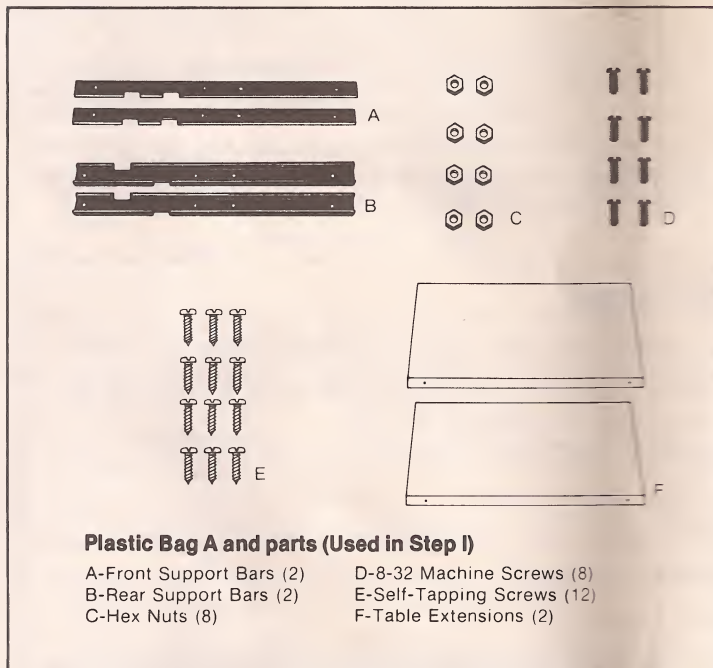


Figure 1

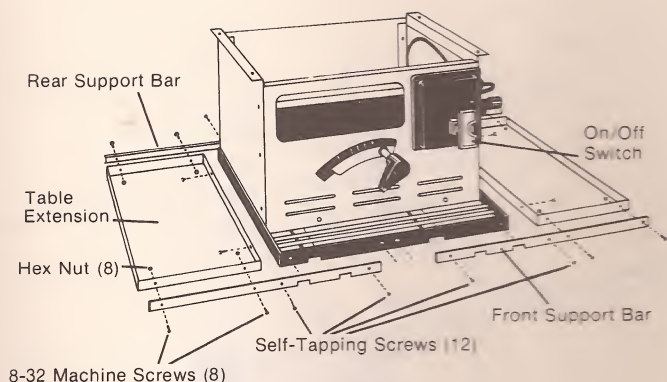


Figure 2

PLASTIC BAG "A" (FIGURE 1) CONTAINS ALL HARDWARE FOR INSTALLING THE TABLE EXTENSIONS. (TABLE EXTENSIONS THEMSELVES ARE NOT IN THE PLASTIC BAG BUT DO APPEAR IN FIGURE 1)

- A. Lay the Table Saw **TOP DOWN** on a smooth, flat surface with the switch facing you as shown in **figure 3**.

CAUTION: DO NOT ATTEMPT TO START OR RUN SAW IN THE UPSIDE DOWN POSITION. DAMAGE TO MOTOR STARTING CIRCUIT WILL RESULT.

- B. Attach a Table Extension to each side of the table top as shown in **figure 4**. Install 2 self-tapping screws in each side but do not tighten them securely at this time.

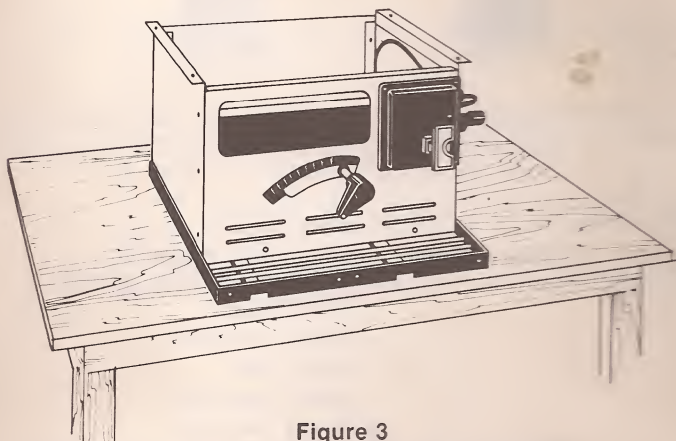


Figure 3

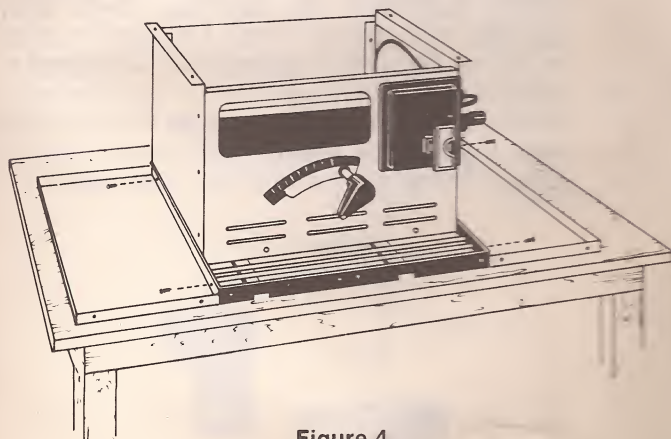


Figure 4

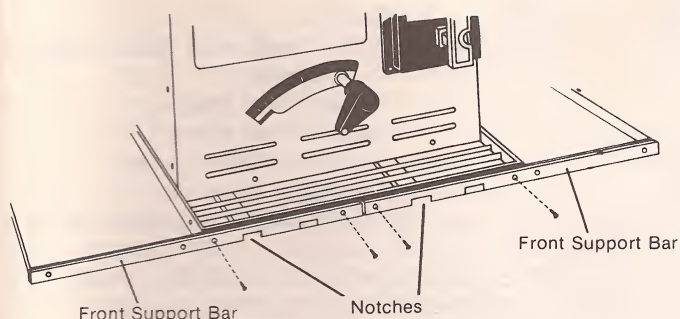


Figure 5

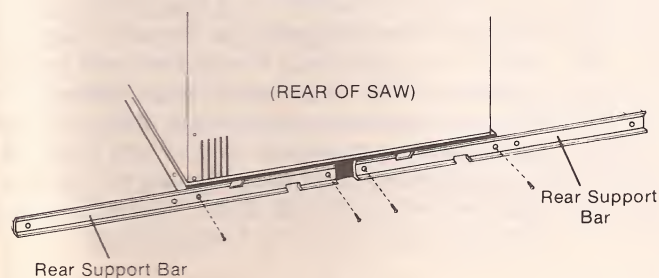


Figure 6

- C. Select either of the two front Support Bars. (See **figure 1**.) These are flat and exactly alike and can be installed on either side.
- D. Using two self-tapping screws, attach each of the Front Support Bars to the front half of the **table top only** as shown in **figure 5**. Make sure that: a. the two notches in the bar are facing down and; b. that one of the notches aligns with the square channel in the table top.
- E. Rotate the saw on the table so that the rear of the saw is facing you.
- F. Select the two identical Rear Support Bars (see **figure 1**) and install on the rear edge of the Table Top as shown in **figure 6**. Make sure that the raised edges of the Support Bars are facing out. (Study **figure 6**.)
- G. Using eight 8-32 machine screws and hex nuts, fasten the Table Extensions to the Front and Rear support bars as shown in **figure 7**.
- H. Tighten all screws at this time. (Do not overtighten these screws.)
- I. Turn the Table Saw right side up and put it aside **AND MOVE TO STEP II — ASSEMBLY OF FENCE**.

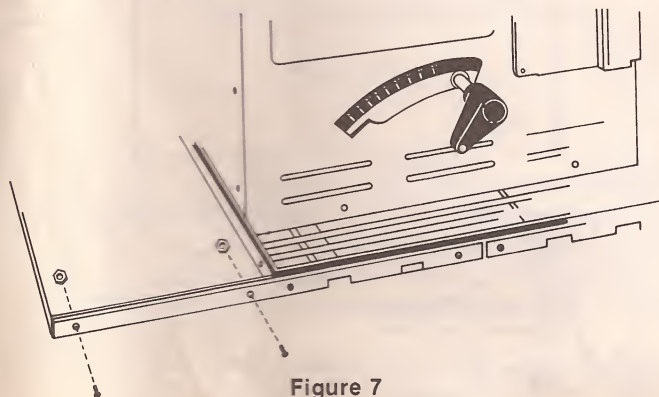


Figure 7

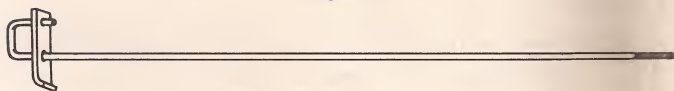
II. ASSEMBLY OF FENCE

Parts needed: one Fence and Fence Head Assembly
one Fence Bracket
one Fence Knob
one 1/4" - 20 Hex Nut
one Flat Washer

PLASTIC BAG "B" CONTAINS ALL HARDWARE NEEDED TO ASSEMBLE THE FENCE. THE FENCE & FENCE HEAD ASSEMBLY AND THE FENCE ROD ARE NOT IN THE PLASTIC BAG BUT ARE SHOWN IN **FIGURE 1**.

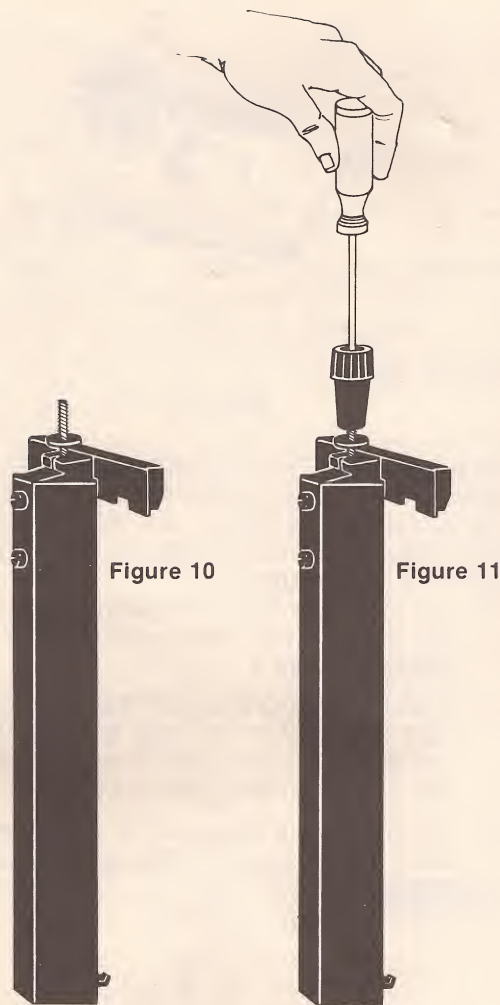
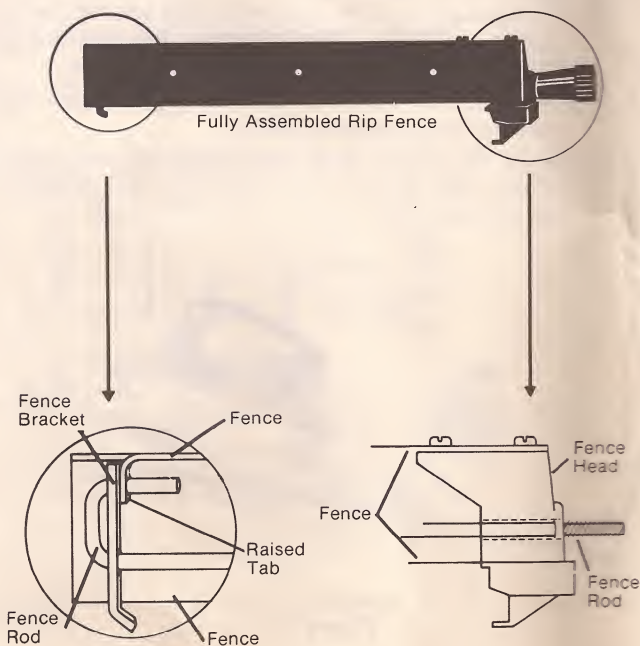
- A. Select the Fence Rod and Fence Bracket and assemble them together as shown in **figure 8**.
- B. Install the assembled Fence Rod and Bracket Assembly into the Fence and Fence Head Assembly as shown in **figure 9**. Make sure that the short bent end of the Fence Rod goes through the raised tab in the end of the Fence and the threaded end of the Fence Rod goes through the hole in the Fence Head.

Figure 8



- C. Stand the Fence Assembly on end as shown in **figure 10**.
- D. Select the largest black plastic knob, the hex nut and the flat washer from the plastic bag. Insert the nut into the hex shaped recess inside the plastic knob.
- E. Install the flat washer over the threaded end of the Fence Rod. (**figure 11**.)
- F. Using a screwdriver or your finger to hold the nut in the recess in the knob, thread the nut onto the threaded end of the Fence Rod as shown in **figure 11**. NOTE: After the nut is

Figure 9



started on the threads, it can be held in the recess by pulling out on the knob as you screw it onto the rod.

III. INSTALLATION OF SAWBLADE

Parts needed: 1 Bevel Crank Handle
1 Elevation Crank Handle
1 Saw Blade
1 Arbor Washer
1 Arbor Nut
1 Arbor Bushing
1 Blade Wrench

PLASTIC BAG "B" CONTAINS ALL HARDWARE NEEDED TO INSTALL THE SAW BLADE. THE BLADE ITSELF IS NOT IN THE PLASTIC BAG, BUT IS SHOWN IN **FIGURE 1**.

- A. Install the Bevel Crank Handle and Elevation Crank Handle as shown in **figure 12**. Be sure to push the handles in until they lock securely in place. (These two handles are identical.)

Figure 12



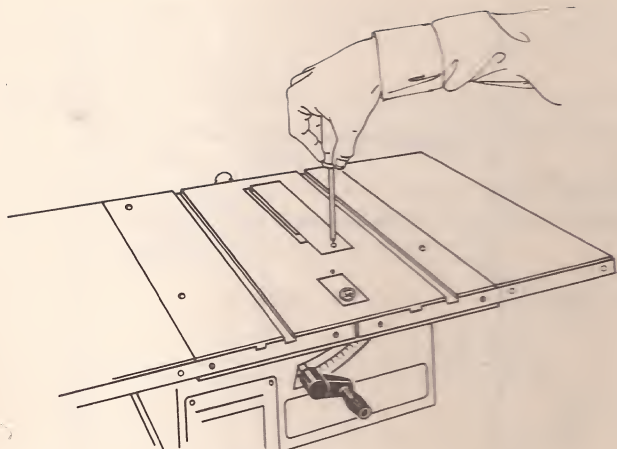


Figure 13

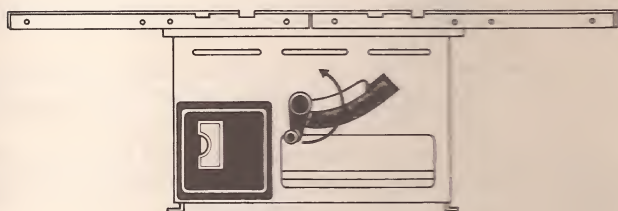


Figure 14

- B. Remove the Table insert from the Table Top, as shown in **figure 13** by removing the Phillips head screw in the forward end.
- C. Elevate the motor to its maximum height by rotating the Elevation Crank counterclockwise as shown in **figure 14**.
- D. Install the Arbor Bushing on the motor shaft as shown in **figure 15**.
- E. Install the Saw Blade over the motor shaft and against the bushing WITH THE SAW TEETH

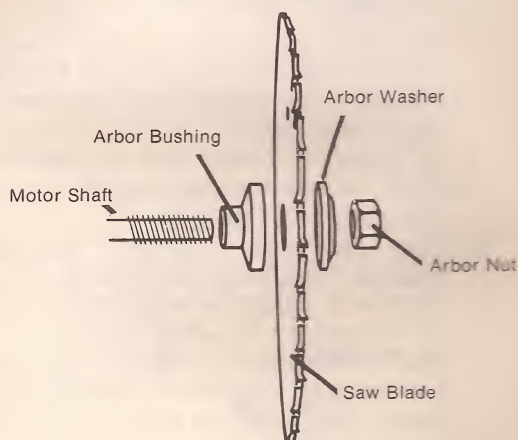


Figure 15

POINTING TOWARD THE FRONT OF THE SAW. (See **figure 16**.) (FRONT OF SAW IS THE SIDE WITH THE SWITCH) NOTE: Saw blades are sharp, use care in handling them.

- F. Place the Arbor Washer against the blade as shown in **figure 15** (concave side toward blade), and thread the Arbor Nut on and tighten securely. NOTE: As you tighten the Arbor Nut, insert a screwdriver blade into the slot of the motor shaft through the hole in the left side of the Saw Housing as shown in **figure 17**. NOTE: An alternate method for holding the blade in place while tightening is to push a block of wood into the saw teeth as shown in **figure 17**.
- G. Re-install the table insert. When installing insert it is very important to press it **FIRMLY TO THE RIGHT** (away from blade) while tightening the screw. NOTE: Make sure that the insert and the head of the screw are flush with the table top.

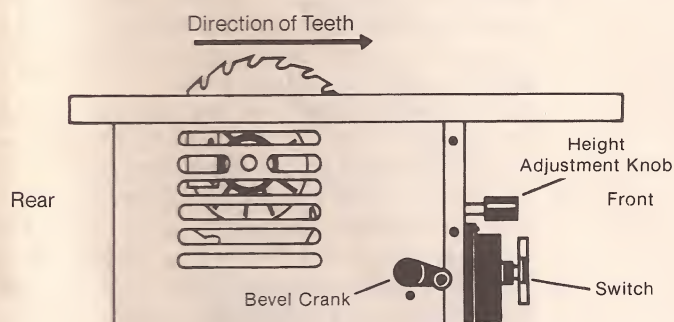


Figure 16

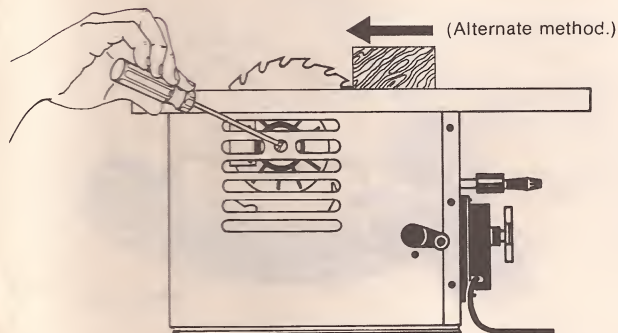


Figure 17

IV. ALIGNMENT OF SAW BLADE

In order to achieve the accuracy of which your Table Saw is capable, the blade must be aligned in two directions. It must be perpendicular to the Table Top and parallel to the Mitre Gauge Slot.

- A. Alignment of blade perpendicular (90°) to the Table Top.
 1. Raise the blade as high as it will go using the Elevation Crank. (**figure 14**.)

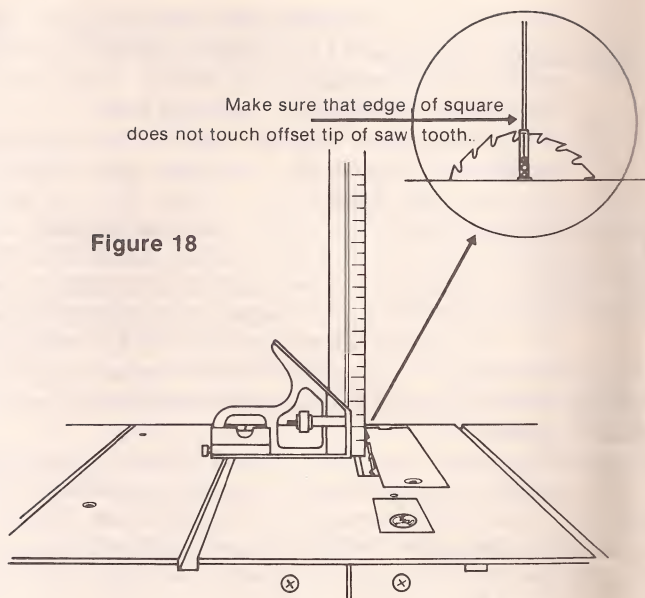


Figure 18

2. Place a combination square (any type of square will serve, but a combination square is best.) on the Table Top and against the blade as shown in **figure 18**.

NOTE: Make sure that the vertical rule of the square is not touching the tip of any saw tooth. This can give a false reading.

3. Adjust blade by turning the Bevel Crank in the appropriate direction until the saw blade is 90° to the Table Top. (**figure 16**.)
4. With the blade perpendicular to the Table Top, check the bevel pointer on the front of the saw above the label. If it does not point to zero, loosen the screw shown in **figure 19** and move the pointer to indicate zero. Securely tighten the screw. THE BLADE IS NOW 90° TO THE TABLE TOP.

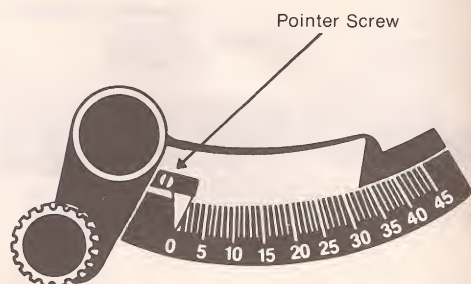


Figure 19

B. Alignment of blade parallel to the Mitre Gauge Slots.

1. Raise the blade as high as it will go.
2. Place the base of a combination square against the edge of either Mitre Gauge Slot and extend the sliding rule of the square to just touch the front side of the saw blade closest to the Table Top as shown in **figure 20**. Do not let the sliding rule touch the tip of any tooth. Tighten the sliding rule of the square.

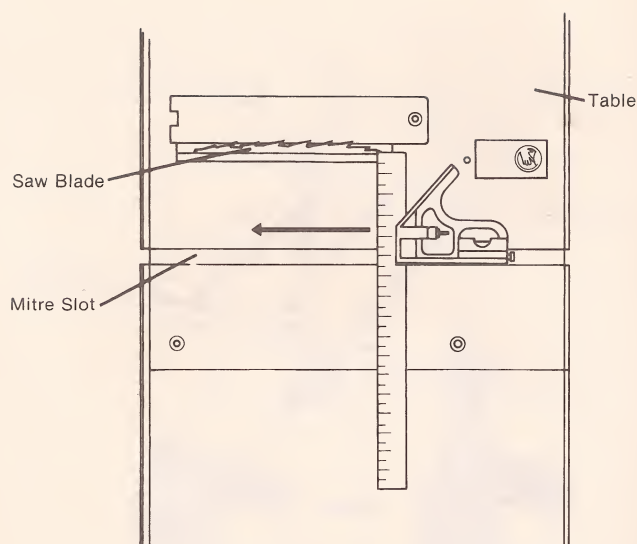


Figure 20

3. Mark this point of contact on the saw blade with a pencil.
4. Rotate the saw blade so that the marked point just emerges from the Table Top at the back of the table.
5. Slide the combination square back keeping its base against the edge of the Mitre Gauge Slot as shown in **figure 20**.

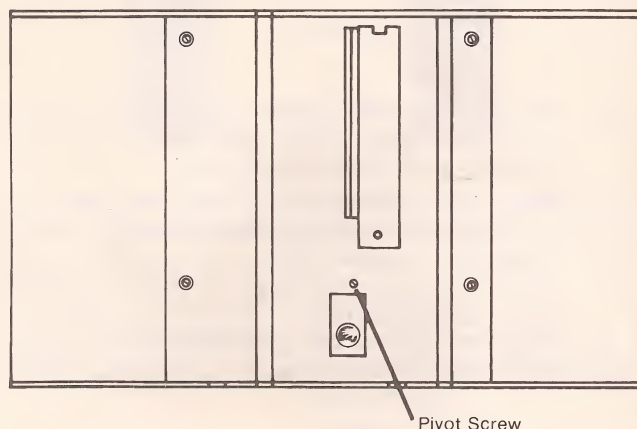


Figure 21

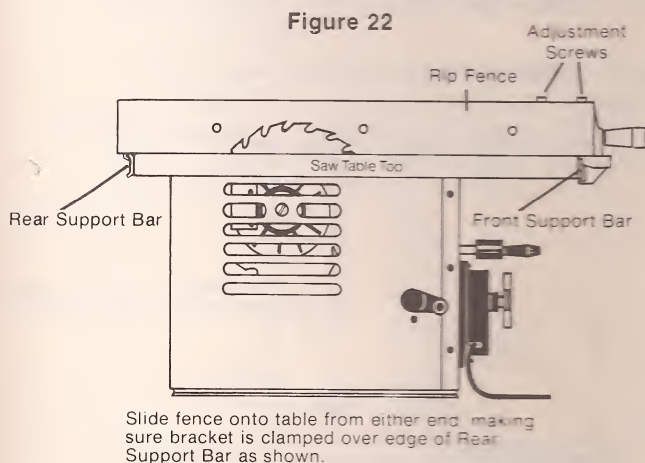
5 Screws

6. If the sliding rule does not touch the marked point or the rule does not fit between the blade and the Mitre Gauge Slot, the blade is out of alignment.
7. To align the blade with the Mitre Gauge Slots, loosen the five screws in the Table Top shown in **figure 21**.
8. Shift the Table Top until the blade is aligned. Re-check the blade as per above steps and adjust as necessary and tighten all five screws securely.

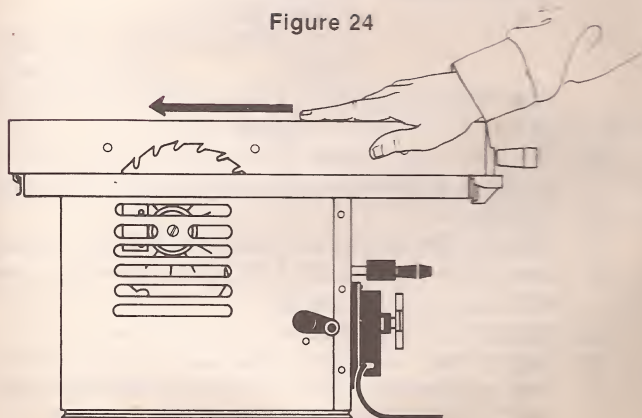
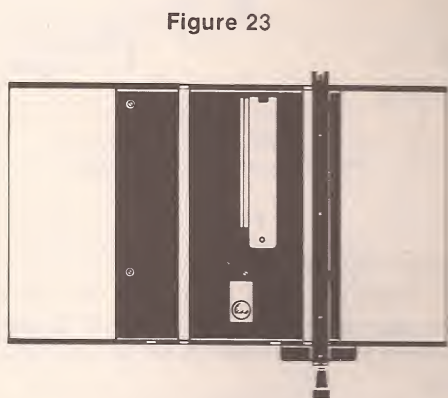
NOTE: If properly aligned, the combination square will slide freely in the Mitre Gauge Slot and just barely touch the saw blade at all points.

NOTE: Do not attempt to make cuts until the blade has been adjusted.

- V. ADJUSTMENT OF RIP FENCE TO SAW BLADE
- Mount the Rip Fence to the Table Top as shown in **figure 22**.
 - With the Rip Fence loose on the table, align the fence edge with the edge of a Mitre Gauge Slot as shown in **figure 23**.
 - Push the head of the Rip Fence firmly against the edge of the Table Top as shown in **figure 24**.



- If the edge of the fence remains aligned (parallel) to the edge of the Mitre Gauge Slot, the Rip Fence is aligned and no adjustment is necessary. If the edge of the Fence is not parallel to the edge of the Mitre Gauge Slot, loosen the two screws on top of the Rip Fence near the head. (See **figure 22**.)

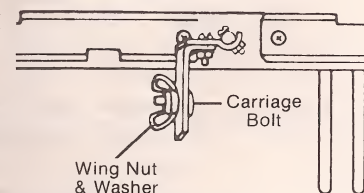
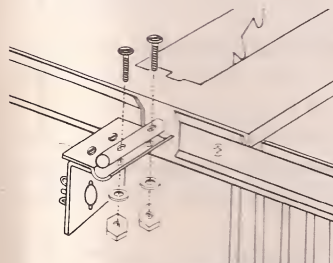
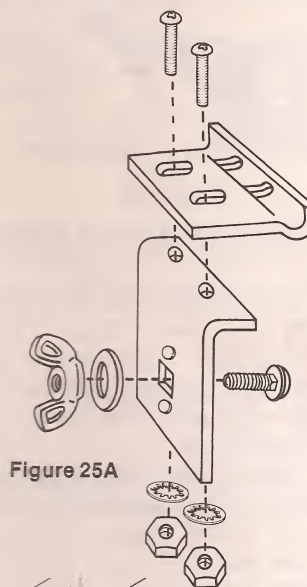


- While continuing to press the Fence head flat against the Table Top, align the Fence edge parallel with the slot and securely tighten the two screws.

VI. MOUNTING THE GUARD ASSEMBLY

Parts needed: 1 Guard Bracket Assembly
1 Guard & Spreader Assembly
PLASTIC BAG "C" CONTAINS ALL HARDWARE NEEDED TO ASSEMBLE AND MOUNT THE GUARD ASSEMBLY. THE GUARD AND SPREADER ASSEMBLY IS NOT IN THE PLASTIC BAG, BUT IS SHOWN IN **FIGURE 1**.

- Assemble the guard bracket as shown in **figure 25A**. Do not tighten any of the screws and nuts at this time.
- Install the guard bracket to the short round shaft extending from the rear of the table top as shown in **figure 25B** using the two machine screws, washers and hex nuts provided.



- Remove the wing nut and washer (shown in **figure 26**) from the bracket and install the Spreader and Guard Assembly over the Carriage Bolt so that the two round lugs on the Angle Bracket fit into the vertical slot on the Spreader as shown in **figure 27**. When installing the Spreader and Guard Assembly, make certain that the sides of the plastic guard are positioned on both sides of the saw blade.
- Install the Flat Washer and securely tighten the Wing Nut on the Carriage Bolt to secure the Spreader to the Angle Bracket.

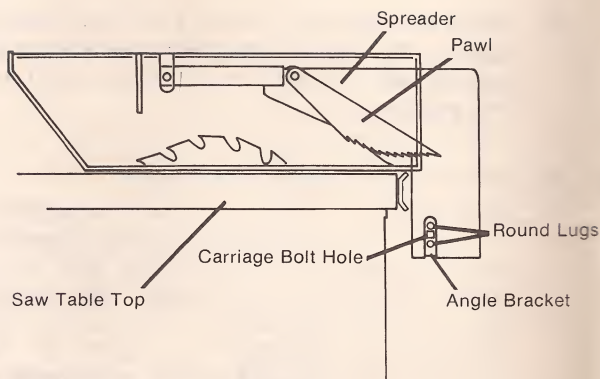


Figure 27

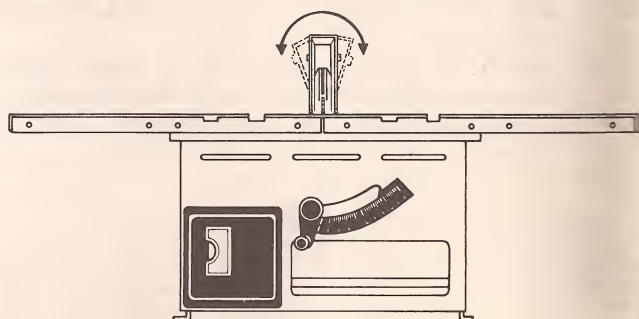


Figure 28

VII. ALIGNING THE SPREADER AND GUARD ASSEMBLY

The Guard Bracket and Spreader and Guard Assembly have been designed for alignment in three directions. Alignment of the Guard Assembly is the most critical process in the assembly of your Table Saw.

Alignment Procedure:

- A. Adjust "Lean" first. (See **figure 28**.)
 1. Loosen the two screws holding the bracket to the round shaft. Rotate the Guard Bracket about the shaft until the Spreader is straight up and down.
 2. Securely tighten the two screws.
- B. Adjust "Horizontal" and "Swing" simultaneously. (See **figure 29**.)
 1. Loosen the two machine screws and hex nuts on the Guard Bracket. Move the Spreader until it is exactly in line with the blade.
 2. Securely tighten the machine screws and hex nuts on the Guard Bracket.

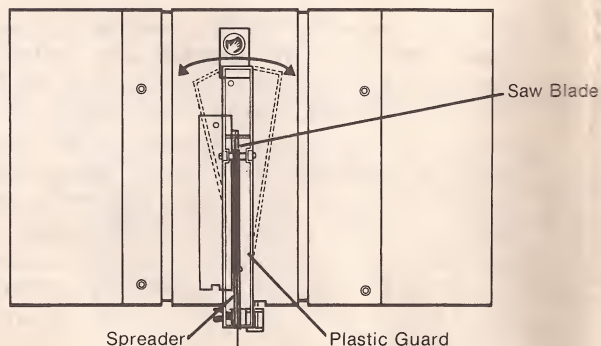


Figure 29

- C. The Spreader and Guard Assembly should now be properly installed and aligned. A test cut to double check will be necessary before any finish cuts are to be made. **DO NOT PERFORM TEST CUT AT THIS TIME. NOTE:** Examine **figures 30** and **31** carefully to determine if you have properly aligned your Guard Assembly. If your saw does not meet the criteria presented in **figures 30** and **31**, repeat the alignment procedure until it does.

Note that spreader is exactly in line with saw blade.

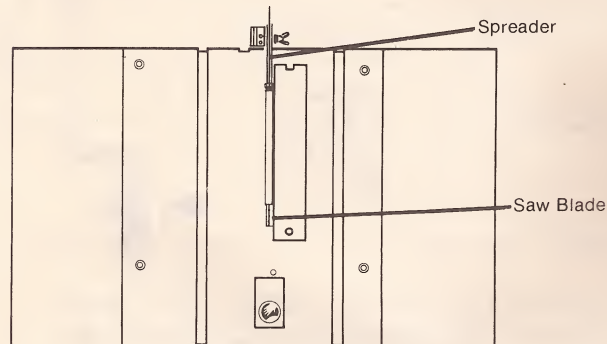
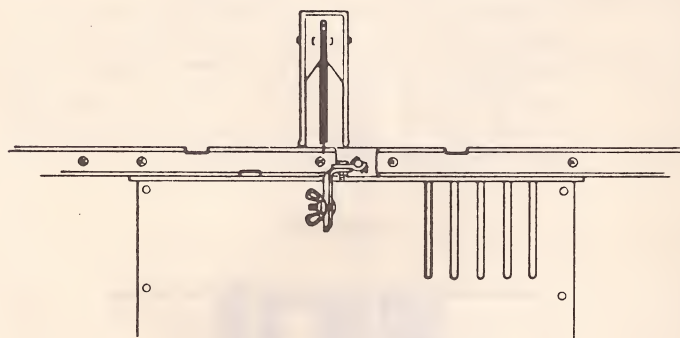


Figure 30



Saw Blade should not be visible when viewed from rear through spreader.

Figure 31

VIII. BENCH MOUNTING

This Table Saw is designed to be used in a stationary position. As such, it must be firmly mounted to a workbench or other stationary rigid frame.

Parts needed: 2 Gibs
6 Wing Screws
4 1/4" Wood Screws (not provided)

SIX WING SCREWS AND 2 GIBS IN PLASTIC BAG "C" shown in **figure 1**.

- A. Position the Table Saw where you want it. (Make sure there is a grounded electrical outlet nearby.)
- B. Place a Gib along one side of the Table Saw as shown in **figures 32 & 33** and mark the holes with a pencil as shown.
- C. Drill Pilot holes for 1/4" wood screws.
- D. Using two 1/4" wood screws, secure the Gib to the workbench so that it clamps over the flange of the Table Saw as shown in **figure 32**.

- E. Insert two Wing Screws into the threaded holes in the Gib so that they go through the holes in the saw base and clamp against the work-bench. (See **figure 34**.)

NOTE: You may elect not to use the Gibs and mount your saw directly to your work-bench. This will work fine but it will have to be unmounted periodically to clear sawdust from the inside.

- F. Repeat steps B through F on the other side of the Table Saw.
- G. At this point there will be one hole left in each gib. Insert the remaining two Wing Screws into these holes and tighten securely. These two Wing Screws will contact the flange of the Table Saw and clamp it in place.

Figure 32

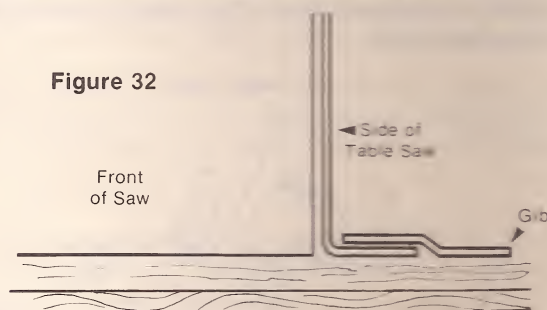


Figure 33

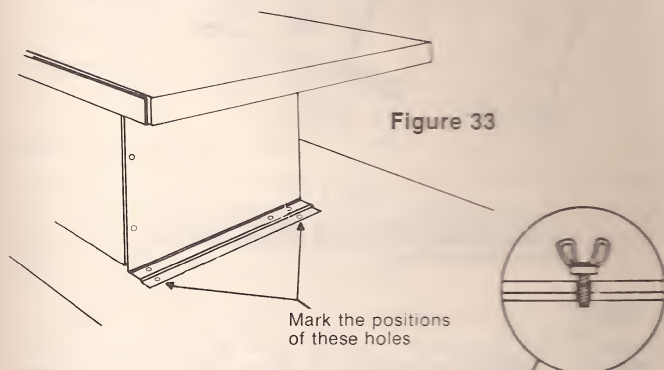
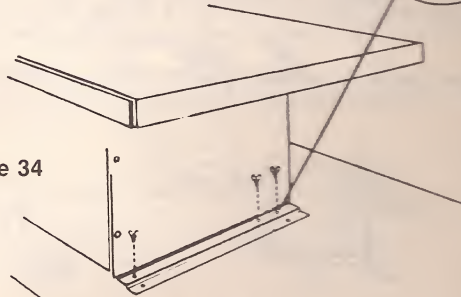


Figure 34



OPERATION

Switch: To turn the tool on, pull the switch out as shown in **figure 35**. To turn it off, push the switch in. To remove the switch key from the saw, depress the side tab as shown in **figure 36** and pull the key out. Never leave the key in the switch when the saw is unattended.

An overload protector is built into the switch box to protect the motor in the case of an overload. If the saw is overloaded, the button will pop out, cutting off power to the saw. **Turn the switch off** and push the button in to reset. NOTE: It may take a few minutes for the saw to cool down enough for the button to stay in.

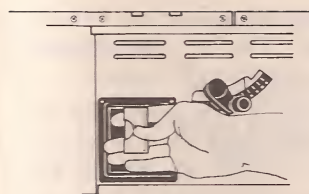


Figure 35

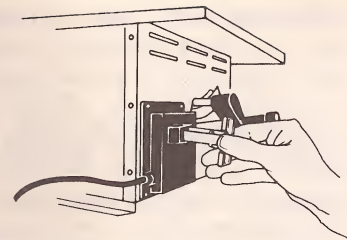


Figure 36

Test Cut: Before you do any cutting with your Table Saw, a test cut must be made to insure that the Guard Spreader is properly positioned and the blade is aligned.

To make the test cut, elevate the blade to its full height and cut a piece of scrap wood. If the spreader passes through the cut in the wood (the "Kerf"—see glossary) it is properly aligned. If the Spreader hits the wood and prevents continued cutting, it must be re-adjusted. Only after successfully completing the test cut can you proceed. Make test cuts with the saw blade at 90° and 45°. When re-adjusting, follow the adjustment procedure presented in this manual. **NEVER** bend or otherwise distort the spreader.

GENERAL OPERATING ADJUSTMENTS

Blade Height

Set blade height by turning the crank handle on the front of the table saw as shown in **figure 37**. Turn the crank counter clockwise to increase height and clockwise to decrease height.

Blade Angle

Blade angle can be adjusted from 0° (perpendicular to table top) to 45° (45° to the table top). Adjust blade angle by turning the crank handle located on the left side of the saw as shown in **figure 38**. The cutting angle is displayed on the mitre scale on the front of the saw.

Rip Fence

The rip fence is used as a guide to assist in cutting in a straight line when ripping only. It can be located on

Figure 37

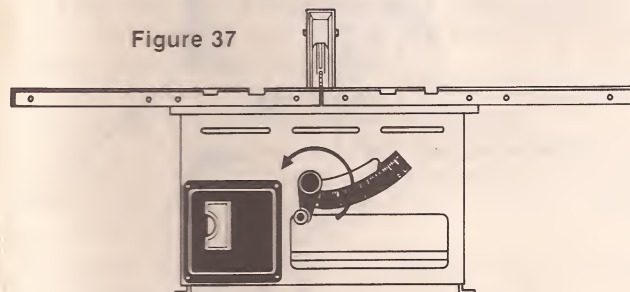
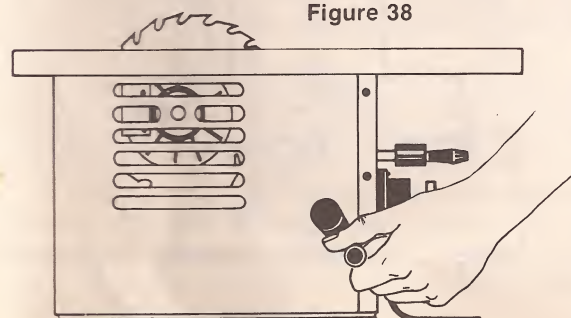


Figure 38



either side of the blade. To adjust the rip fence, turn the knob counter clockwise to loosen. Position the fence as desired and turn the knob clockwise to lock in place.

To assure accurate ripping, check the alignment between the rip fence and the saw blade each time you change the fence's location. Figure 39 shows two distances from the saw blade to the rip fence; "A" and "B". Distance "A" and distance "B" must be equal for proper rip fence alignment.

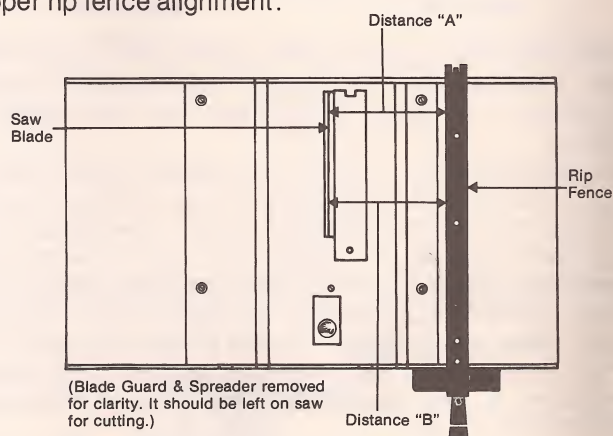


Figure 39

Mitre Gauge

The mitre gauge is for holding a piece of wood at a prescribed angle for cutting. It is adjustable from 0° to 60° and can be adjusted by loosening the knob as shown in figure 40, setting the protractor to the desired angle and tightening the knob. Position the mitre gauge in either of the 2 mitre gauge slots in the table top. Hold your piece of wood against the gauge and push it into the blade as shown in figure 41. You can enlarge the mitre gauge by bolting a piece of wood across its face.

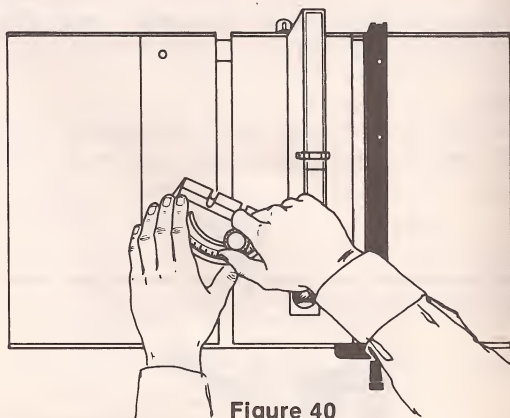


Figure 40

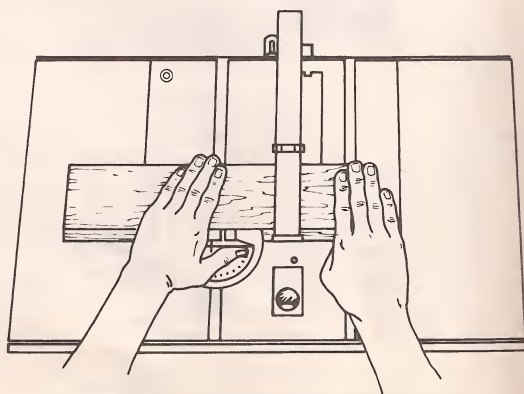


Figure 41

BASIC TABLE SAW OPERATIONS

Some of the accompanying pictures show the guard removed for clarity. (Never remove the guard except when making dado or rabbet cuts.)

CROSSCUTTING (USE MITRE GAUGE)

Crosscutting is cutting across the grain at 90° or square with the edge. This is done with the Mitre Gauge set at "0°". The Mitre Gauge may be used on either side of the blade. The workpiece must be held firmly against the Mitre Gauge head and advanced toward the blade as shown in figures 42, 43 and 44. **Glue a piece of sandpaper to the head of the Mitre Gauge to help prevent the workpiece "creeping". Use rubber cement so the sandpaper can be easily removed.** Always "dress" or apply pressure to one side of the Mitre Gauge slot for maximum accuracy. Be certain the Mitre Gauge knob is locked securely.

Figure 42

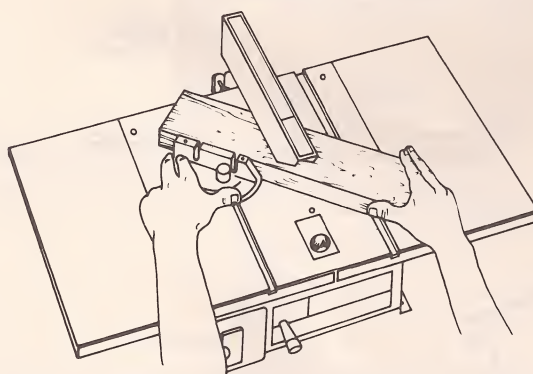


Figure 43

NOTE: GUARD ASSEMBLY REMOVED ONLY FOR CLARITY. IT SHOULD BE LEFT ON THE SAW FOR CUTTING.

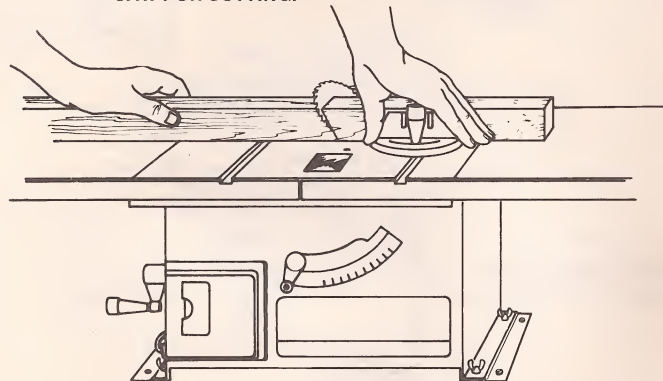
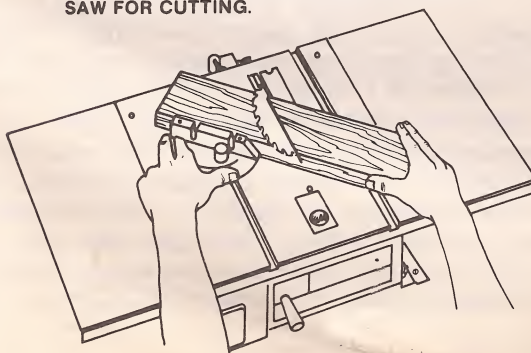


Figure 44

NOTE: GUARD ASSEMBLY REMOVED ONLY FOR CLARITY. IT SHOULD BE LEFT ON THE SAW FOR CUTTING.



The graduations on the Mitre Gauge provide accuracy for average work. When extreme accuracy is required, make a trial cut and check with a square or protractor. **NEVER PICK UP A CUT OFF SCRAP WHILE THE BLADE IS STILL RUNNING ... It takes only a few seconds for the blade to stop after the switch has been pushed off.**

When crosscutting or mitering, the fence should be removed from the table. Only the mitre gauge should be used. Never use the Rip Fence as a stop when cutting duplicate lengths. This can be a dangerous practice because binding and kickback can occur.

MITRE CUTTING

A mitre cut is any cut that requires a setting other than 0°. A common mitre would be a simple four sided frame such as a picture frame. Set the miter for exactly 45°.

When mitering, the blade has a tendency to pull the workpiece causing it to creep. This can, of course, spoil a perfect mitre. So a mitre cut requires some extra attention.

COMMON MITRE SETTINGS

Square	4 sides	45°
Hexagon	6 sides	30°
Octagon	8 sides	22½°

BEVEL CROSSCUTTING

Bevel crosscutting is the same as crosscutting other than the fact that the material is being cut at an angle other than 90°. The material lies flat on the table and the blade is set at the desired angle.

Here again, you will use the Mitre Gauge (at "0" setting) to simplify this operation. Bevel crosscuts can be made in much the same manner as the crosscut or mitre cut explained previously.

BE AWARE of the path of the blade in bevel cutting and keep hands well away from this path.

COMMON BEVEL SETTINGS

Square 4 sides	Bevel Setting 45°
Hexagon 6 sides	Bevel Setting 30°
Octagon 8 sides	Bevel Setting 22½°

COMPOUND MITRE CUTTING

A mitre requires a Mitre Gauge setting and a bevel calls for a bevel setting. A compound angle requires both the mitre and bevel settings. This would be for a shadow box picture frame, for example.

Use the following settings for the most common compound angle cuts:

Work Angle*	Four Sided Figure		Six Sided Figure	
	Mitre Gauge Setting	Bevel Setting	Mitre Gauge Setting	Bevel Setting
15°	43¼°	14½°	29°	8¼°
30°	37¼°	26½°	26°	16°
45°	30°	35¼°	21°	22¼°
60°	21°	41°	14½°	26½°

*See figure 45 for explanation of work angle.

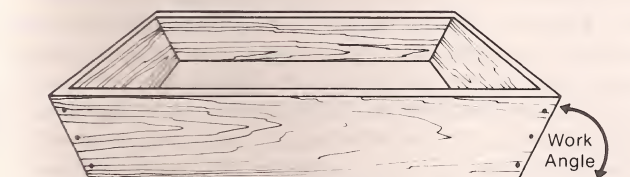


Figure 45

USING THE RIP FENCE figures 46 & 47

RIPPING, BEVEL RIPPING, AND RABBETING are performed using the RIP FENCE together with a PUSH STICK as shown in figure 48.

WARNING: FOR YOUR OWN SAFETY, ALWAYS OBSERVE THE FOLLOWING SAFETY PRECAUTIONS IN ADDITION TO THE SAFETY INSTRUCTIONS ON PAGE 2.

READ ALL INSTRUCTIONS

1. Never make rip, bevel rip or rabbet cuts FREEHAND (without using the rip fence) because the blade could bind in the cut and cause a KICKBACK.
2. Always lock the rip fence securely when in use.
3. Remove mitre gauge from table.
4. Make sure blade guard is installed for all thru-sawing type cuts. Frequently check the action of the ANTI-KICKBACK PAWLS by passing the workpiece alongside of the spreader while saw is OFF. Pull the workpiece TOWARD you. If the PAWLS do not DIG into the workpiece and HOLD it ... the pawls must be REPLACED.
5. Elevate the saw blade high enough to insure that the gullet just clears the material being cut.
6. Do not stand directly in front of the blade in case of a KICKBACK (small cut-off piece caught by the back of the blade and thrown toward the operator). Stand to either side of the blade.
7. Keep your hands clear of the blade and out of the path of the blade.
8. If the blade stalls or stops while cutting, TURN SWITCH OFF AND UNPLUG SAW before attempting to free the blade.
9. Do not reach over or behind the blade to pull the workpiece through the cut ... to support long or heavy workpieces or to remove small cut-off pieces of material or FOR ANY OTHER REASON.
10. Do not pick up small pieces of cut-off material from the table. REMOVE them by pushing them OFF the table with a long stick. Otherwise they could be thrown back at you by the rear of the blade. ALWAYS USE CAUTION.

11. Do not remove small pieces of cut-off material that may become TRAPPED inside the blade guard while the saw is RUNNING. THIS COULD ENDANGER YOUR HANDS or cause a KICKBACK. Turn the saw OFF. After the blade has stopped turning, lift the guard and remove the piece.
12. Always use recommended size blades and accessories.
13. Make sure the blade is properly aligned before making any cuts.

SAVE THESE INSTRUCTIONS FOR FUTURE USE.

RIPPING:

Ripping is cutting lengthwise of the material or with the grain. You may rip on either side of the blade because the table accepts the fence on either side. A simple ripping operation is shown in **figure 46**, notice the placement of the hands. Both hands can be used in starting the cut. When there is approximately twelve (12) inches left to be ripped ... use only one hand, with your thumb pushing the material, your index and second finger holding the material down and your other fingers hooked over the fence as shown in **figure 47**. Always keep your thumb along side your first two (2) fingers and near the fence.

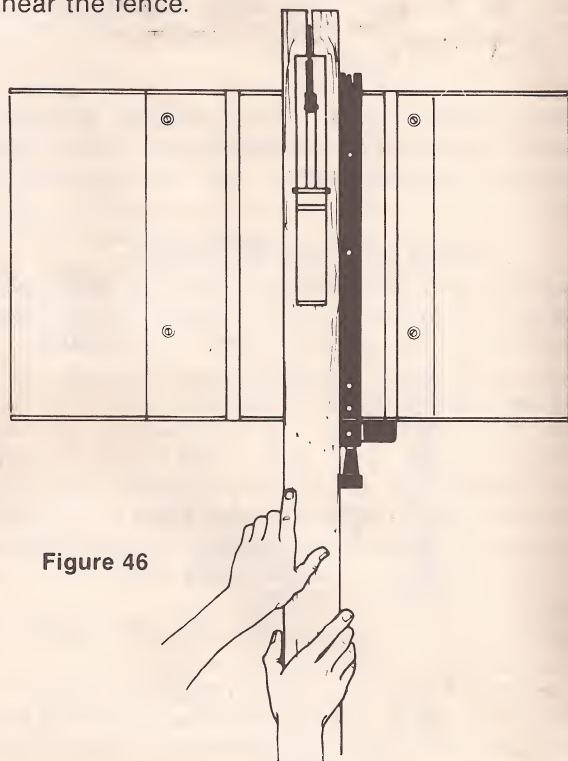


Figure 46

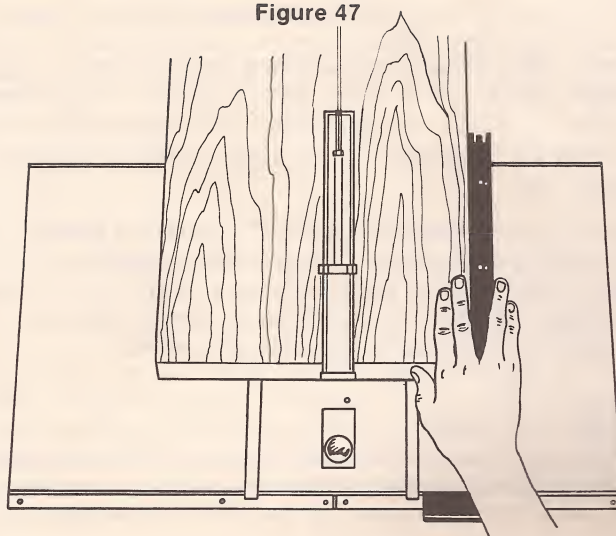
When sawing a long piece of material or a panel, always use a work support. Sample supports are shown in **figure 49**. Just a sawhorse with an adjustable support will serve the purpose.

When ripping small pieces, a push stick should be used. Start the rip cut in the same manner as explained but when your hand is within eight (8) or ten (10) inches of the blade, use the push stick as shown in **figure 48**.

BEVEL RIPPING:

Bevel ripping is accomplished much the same as straight ripping except you set the bevel adjustment to whatever degree you wish. Extra caution should be used

Figure 47



when ripping with the fence on the left side of the blade. You will note the blade tilts to the left. **NO BEVEL RIP LESS THAN SIX (6) INCHES SHOULD BE MADE ON THE LEFT HAND SIDE. THE SAME PRECAUTIONS SHOULD BE FOLLOWED AS OUTLINED UNDER "RIPPING" AND PUSH STICKS SHOULD ALWAYS BE USED.**

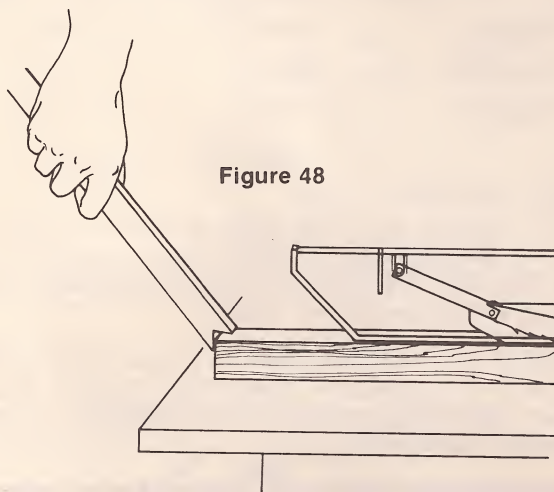


Figure 48

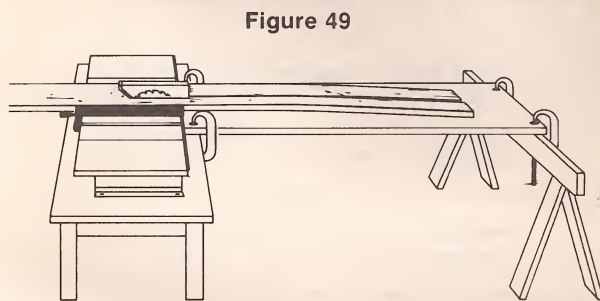
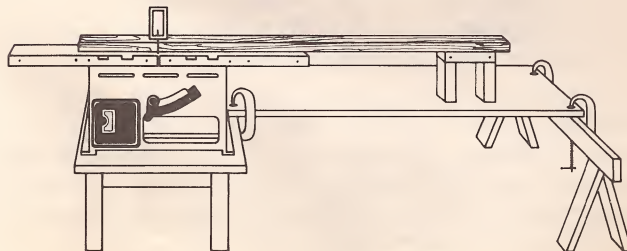


Figure 49



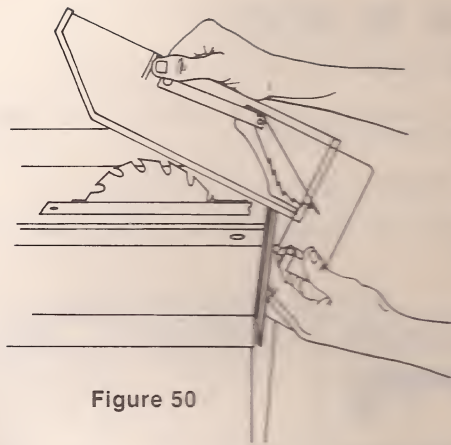


Figure 50

RABBETING & DADO CUTTING:

(CAUTION: DO NOT ATTEMPT TO MAKE DADO OR RABBET CUTS WIDER THAN 3/4").

Since Rabbet and Dado cuts are not through cuts, they must be performed with the guard removed. To remove the guard, loosen the wing nut and lift entire spreader and guard assembly off (see figure 50). When using a

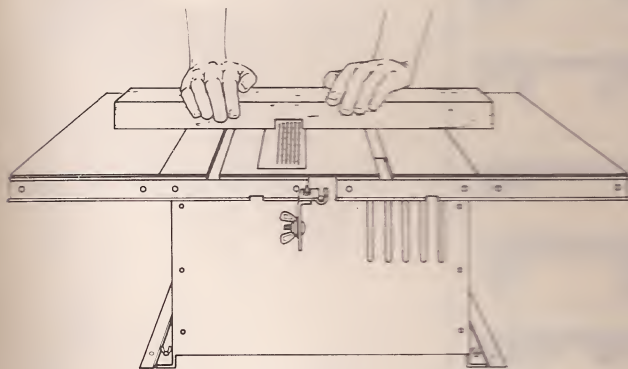


Figure 51

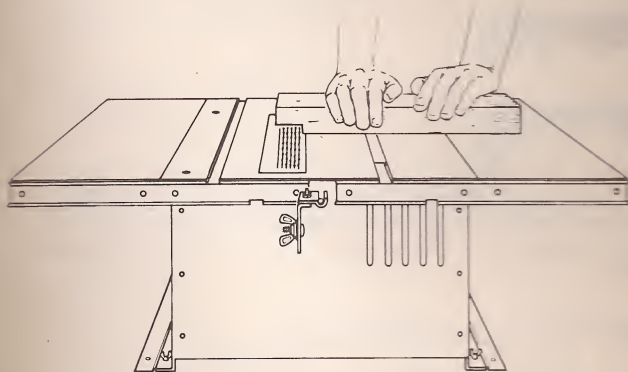


Figure 52

dado attachment, the special Shaper and Dado insert (see back cover) must be used. Rabbet cuts can be made on the end of the workpiece (cross grain) or edge (with the grain). A rabbet cut can be made with a dado (see figure 51 & 52). Extra caution should be used when making these cuts because the guard must be removed.

DADOING AND GROOVING:

CAUTION: NEVER ATTEMPT TO USE A DADO SET AT ANY BEVEL ANGLE OTHER THAN STRAIGHT UP (0°). SERIOUS DAMAGE TO THE SAW COULD OCCUR.

Anytime a cut is required that is considerably wider than the saw kerf, a dado is used. (dado set not provided.) A dado cut is commonly used both to add support and line up a shelf for a cabinet, bookcase or some such project. When using the dado, the guard must be removed. Use extreme care when using the dado without the guard. If a deep cut is required... use several successive passes rather than attempting to make it with one pass.

BE SURE TO PLACE THE GUARD BACK IN POSITION AND CHECK ADJUSTMENT WHEN THE DADO CUTS ARE COMPLETED.

IMPORTANT

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustments should be performed by Black & Decker Service Centers or other qualified service organizations, always using Black & Decker replacement parts.

HOME USE WARRANTY (A FULL TWO YEAR WARRANTY)

Black & Decker warrants this product for two years against any defects (that are due to faulty material or workmanship). Please return the complete unit, transportation prepaid, to the seller (if a participating retailer) for free replacement (proof of purchase may be required). The unit may also be returned to a Black & Decker Service Center or Authorized Service Station, listed under "Tools Electric" in the yellow pages for free replacement or repair at our option. This warranty does not apply to accessories. This warranty gives you specific legal rights and you may have other rights which vary from state to state. Should you have any questions, contact your nearest Black & Decker Service Center Manager.

BLACK & DECKER SAW BLADES

ACCESSORIES (Available from your dealer at extra cost)

Accessories for your Table Saw are listed in this manual and are available at extra cost from your local dealer, Black & Decker Service Center, or by writing to:
Customer Services, Black & Decker (U. S.) Inc., 500 Hanover Pike, Hampstead, Maryland 21074

USE ONLY ACCESSORIES DESIGNED FOR USE WITH YOUR TABLE SAW. THE USE OF ANY OTHER ACCESSORY OR ATTACHMENT MAY BE HAZARDOUS.

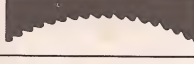
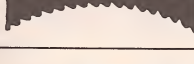
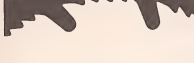
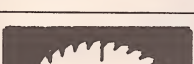
Standard: Outstanding value for the price.

Premium: Industrial chrome plating gives twice the cutting life of unplated blades.

Carbide Tipped: Exceptional blade life.

Caution: Do not use abrasive, or friction cutting blades with this saw.

PART NUMBERS AND SIZES

TYPE OF BLADE	TOOTH SHAPED	STANDARD	PREMIUM
COMBINATION Chisel tooth configuration means this blade is the fastest cutting blade in our line. Specifically designed for general-purpose ripping and cross-cutting where the finish of the cut is not critical.		73-008 (8")	73-108 (8")
FRAMING/RIP An all-purpose blade for smooth, fast cutting in any direction. Rips, crosscuts, miters, etc. Gives especially fast, smooth finishes when cutting with the grain of both soft and hard woods.		73-038 (8")	73-138 (8")
FLOORING For use where nails or other metal objects may be encountered, such as cutting reclaimed lumber, flooring, opening crates. Allows crosscuts as well as miters.			73-168 (8")
CROSS CUT Specifically designed for smooth, fast cutting across the grain of both hard and soft woods where finish is an important factor. May also be used for rip and crosscuts on extremely hard woods.			73-128 (8")
PLYWOOD Finely ground teeth give cuts with minimum splintering in plywood, paneling, veneers, Cellotex, thin plastics, etc. Will make smooth crosscuts and miters equally well.		73-048 (8")	
HOLLOW GROUND PLANER Specially ground for satin-smooth finish cuts (cross-cuts, rips and miters) in all solid woods. A professional quality blade for use in cabinet work, furniture, etc. Specifically designed to make extremely smooth cuts in wood.			73-158 (8")
HOLLOW GROUND PLYWOOD Special taper grinding on the sides of this thin-rim blade gives an absolutely smooth cut in plywood, veneers and laminates, etc. Can be used in crosscutting and mitering for a professional finish on all types of cabinet work.			73-148 (8")
CARBIDE TIPPED (8 tooth) Specially designed for cutting tough-to-cut materials such as: Transite, Cemesto board, asbestos, Formica and Masonite. Will also cut wood where speed and finish are not critical.			73-363 (8")
CARBIDE TIPPED (12 tooth) Chisel tooth combination blade for fast general-purpose cutting in all types of woods. Tips are of tungsten carbide material which outlasts regular steel blades up to 10 to 1. Teeth are accurately set for ease of cutting.			73-366 (8")
CARBIDE TIPPED (20 tooth) Chisel tooth combination blade for fast general-purpose cutting in all types of woods. Tips are of tungsten carbide material which outlasts regular steel blades up to 10 to 1. Teeth are accurately set for ease of cutting.			73-370 (8")
CARBIDE TIPPED (40 tooth) These blades have more teeth than the blades above for smoother, almost splinter-free cuts in all types of wood (including particle board, hardboard, wallboard, plastic and plastic laminates). Hard, industrial chrome plated to resist rust and reduce gum or resin build-up on teeth			73-375 (8")

NOTE: Carbide tipped blades cannot be sharpened with a file, they must be sharpened professionally. Not for use on masonry or metals.

6" DADO SETS FEATURES

- Width adjustable from 1/4" through 13/16" (see page 15 under "Rabbeting and Dado Cutting" for dado restrictions.)
- Fits most 8", 9", 10" and 12" radial arm and table saws having a 5/8" arbor.
- Set contains: 2 outside cutters, 1/8" thick; 4 chippers, 1/8" thick; 1 chipper, 1/16" thick; paper shims and a reusable storage box.

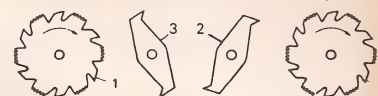
CAT. # R 6024 6" FLAT GROUND DADO SET

Item #	Quantity	Description
1	2	Outside Cutter
2	4	Chipper 1/8" thick
3	1	Chipper 1/16" thick

CAT. # R 6001 6" HOLLOW GROUND DADO SET

Item #	Quantity	Description
1	2	Outside Cutter
2	4	Chipper 1/8" thick
3	1	Chipper 1/16" thick

PARTS LIST



SHAPER & DADO INSERT. (CATALOG # 35038) (Must be used when using above Dado Sets with your saw.)

BLACK & DECKER (U.S.) INC. CONSUMER POWER TOOLS DIVISION

3012 Highwoods Blvd.
Raleigh, North Carolina 27625 U.S.A.